

## EAST Search History

| Ref # | Hits  | Search Query                       | DBs                                                                        | Default Operator | Plurals | Time Stamp       |
|-------|-------|------------------------------------|----------------------------------------------------------------------------|------------------|---------|------------------|
| L1    | 1801  | (257/99).CCLS.                     | US-PGPUB;<br>USPAT                                                         | OR               | OFF     | 2007/04/01 10:20 |
| L2    | 41183 | side near (inclin\$5 or declin\$5) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/04/01 10:20 |
| L3    | 14608 | side near emit\$5                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/04/01 10:20 |
| L4    | 52    | L3 and L2 and led                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/04/01 10:20 |
| L5    | 7572  | side near (slant\$)                | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/04/01 10:20 |
| L6    | 21    | L3 and L5 and led                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/04/01 10:20 |
| L7    | 2238  | cathode near (up or upward\$2)     | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/04/01 10:20 |
| L8    | 654   | (257/81).CCLS.                     | US-PGPUB;<br>USPAT                                                         | OR               | OFF     | 2007/04/01 10:27 |
| L9    | 272   | (257/653).CCLS.                    | US-PGPUB;<br>USPAT                                                         | OR               | OFF     | 2007/04/01 10:20 |

## EAST Search History

|     |      |                                                                                            |                                                                            |    |     |                  |
|-----|------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|----|-----|------------------|
| L10 | 10   | itai-junichi\$.in.                                                                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/04/01 10:20 |
| L11 | 2492 | (257/678).CCLS.                                                                            | US-PGPUB;<br>USPAT                                                         | OR | OFF | 2007/04/01 10:20 |
| L12 | 567  | (257/623).CCLS.                                                                            | US-PGPUB;<br>USPAT                                                         | OR | OFF | 2007/04/01 10:20 |
| L13 | 231  | led and L7                                                                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/04/01 10:20 |
| L14 | 711  | anode near (down or downward\$2)                                                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/04/01 10:20 |
| L15 | 616  | anode near (down or downward)                                                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/04/01 10:20 |
| L16 | 12   | ("5537433"   "5705834"   "5779924"  <br>"5793062"   "6057562").PN. OR<br>("6429462").URPN. | US-PGPUB;<br>USPAT;<br>USOCR                                               | OR | ON  | 2007/04/01 10:20 |
| L17 | 2137 | cathode near (up or upwards)                                                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/04/01 10:20 |
| L18 | 844  | (257/100).CCLS.                                                                            | US-PGPUB;<br>USPAT                                                         | OR | OFF | 2007/04/01 10:20 |

## EAST Search History

|     |     |                                  |                                                                            |    |    |                  |
|-----|-----|----------------------------------|----------------------------------------------------------------------------|----|----|------------------|
| L19 | 90  | led and L14                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/01 10:20 |
| L20 | 9   | L13 and L19                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/01 10:20 |
| L21 | 245 | (kiyoshi-ota or ota-kiyoshi).in. | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/01 10:20 |
| L22 | 7   | L21 and led                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/01 10:20 |
| L23 | 24  | L21 and emitting                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/01 10:20 |
| L24 | 106 | sato-tadashige.in.               | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/01 10:20 |
| L25 | 44  | L24 and (led or emitting)        | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/04/01 10:20 |

## EAST Search History

|     |       |                                    |                                                                            |    |     |                  |
|-----|-------|------------------------------------|----------------------------------------------------------------------------|----|-----|------------------|
| L26 | 0     | tadashige-sato.in.                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/04/01 10:20 |
| S2  | 10    | itai-junichi\$.in.                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/03/31 22:06 |
| S3  | 567   | (257/623).CCLS.                    | US-PGPUB;<br>USPAT                                                         | OR | OFF | 2007/03/31 22:10 |
| S4  | 272   | (257/653).CCLS.                    | US-PGPUB;<br>USPAT                                                         | OR | OFF | 2007/03/31 22:07 |
| S5  | 2492  | (257/678).CCLS.                    | US-PGPUB;<br>USPAT                                                         | OR | OFF | 2007/03/31 22:06 |
| S6  | 654   | (257/81).CCLS.                     | US-PGPUB;<br>USPAT                                                         | OR | OFF | 2007/03/31 22:06 |
| S7  | 1801  | (257/99).CCLS.                     | US-PGPUB;<br>USPAT                                                         | OR | OFF | 2007/03/31 22:06 |
| S8  | 844   | (257/100).CCLS.                    | US-PGPUB;<br>USPAT                                                         | OR | OFF | 2007/03/31 22:06 |
| S9  | 14016 | side near emit\$5                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/03/31 22:11 |
| S10 | 41183 | side near (inclin\$5 or declin\$5) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/03/31 22:19 |
| S11 | 52    | S9 and S10 and led                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/03/31 22:20 |

## EAST Search History

|     |      |                                                                                      |                                                                            |    |    |                  |
|-----|------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------|----|----|------------------|
| S12 | 12   | ("5537433"   "5705834"   "5779924"   "5793062"   "6057562").PN. OR ("6429462").URPN. | US-PGPUB;<br>USPAT;<br>USOCR                                               | OR | ON | 2007/03/31 22:15 |
| S13 | 7571 | side near (slant\$)                                                                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/31 22:20 |
| S14 | 21   | S9 and S13 and led                                                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/31 22:21 |
| S15 | 2133 | cathode near (up or upwards)                                                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/31 22:22 |
| S16 | 616  | anode near (down or downward)                                                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/31 22:22 |
| S17 | 2178 | cathode near (up or upward\$2)                                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/31 22:23 |
| S18 | 711  | anode near (down or downward\$2)                                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/31 22:23 |

## EAST Search History

|     |     |                                  |                                                                            |    |    |                  |
|-----|-----|----------------------------------|----------------------------------------------------------------------------|----|----|------------------|
| S19 | 231 | led and S17                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/31 22:23 |
| S20 | 90  | led and S18                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/31 22:24 |
| S21 | 9   | S19 and S20                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/31 22:23 |
| S22 | 245 | (kiyoshi-ota or ota-kiyoshi).in. | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/31 22:30 |
| S23 | 7   | S22 and led                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/31 22:33 |
| S24 | 24  | S22 and emitting                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/31 22:32 |
| S25 | 0   | tadashige-sato.in.               | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/31 22:33 |

## EAST Search History

|     |     |                           |                                                                            |    |    |                  |
|-----|-----|---------------------------|----------------------------------------------------------------------------|----|----|------------------|
| S26 | 106 | sato-tadashige.in.        | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/31 22:33 |
| S27 | 44  | S26 and (led or emitting) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/03/31 22:33 |